

PCT/EP2004/004180  
2003P06799WOUS

- 1 -

# Description

Internal roof cladding for a large-capacity vehicle for passenger transport, in particular a rail vehicle

The invention relates to an internal roof cladding for a large-capacity vehicle for passenger transport, in particular a rail vehicle, comprising a cladding element arranged in the region of a door drive, and coving elements adjoining said cladding element.

It is generally customary in rail vehicles for door drives arranged on the roof side to be clad by means of a respective element and for there to be arranged between these elements coving elements which likewise form part of the internal cladding. As a rule, the design and especially the shaping of the cladding elements and of the coving elements are fixed at the actual vehicle design phase, frequently in collaboration with the customer. The appearance which is thereby imparted to the vehicle is barely capable of being altered subsequently, in particular after the vehicle has been delivered, unless at considerable cost.

The object on which the invention is based is to provide a cladding design for a vehicle of the generic type which allows vehicles to be produced whose visual appearance can be modified at little cost and with little outlay on parts. These modifications should also be possible after a customer has decided on a specific vehicle configuration and, if appropriate, even after the vehicle has gone into service.

This object is achieved according to the invention in that the cladding element is provided as a base module and has on its side facing the longitudinal center of the vehicle a surface for seating at least one further cladding element in a precisely fitting manner.

The invention advantageously ensures that at the start of an order the customers have the option of ordering a variant of the vehicle which, in terms of the internal cladding, is basic, simple and therefore inexpensive, with it being possible for this vehicle to be retrofitted with cladding elements at any time or even to have its entire interior design modernized after a number of years.

Advantageous refinements of the invention are given in the subclaims.

The invention will be described in further detail below with the aid of exemplary embodiments which are illustrated in the drawing, in which

- fig. 1            is a perspective view showing the interior of a vehicle for passenger transport,
- fig. 2            shows a cladding element for a door drive, forming a base module,
- fig. 3            is a view based on fig. 2 showing a further cladding element,
- fig. 4            is a view based on fig. 3 showing an additional cladding element in a first configuration,
- fig. 5            is a view based on fig. 3 showing an additional cladding element in a second configuration,

- fig. 6 is a perspective partial view showing a modular arrangement of cladding elements, including lighting units,
- fig. 7 is a perspective view showing coving elements and their lighting units.

The vehicle has a floor 8, side walls 10 provided with doors 9, and a roof 5. Cladding elements 1 are arranged in the region of door drives and they are adjoined by coving elements 4. The cladding elements 1 are in each case provided as a base module and are preferably connected to the side walls 10 by means of concealed hinges, with the result that the door drives are readily accessible for maintenance work. Each cladding element 1 is provided on its side facing the longitudinal center of the vehicle with a surface 1a for seating at least one further cladding element 2 in a precisely fitting manner.

The further cladding elements 2 may be designed as decorative end-pieces. Alternatively, the further cladding elements 2 may have on their side facing the longitudinal center of the vehicle a surface 2a for seating additional cladding elements 3 in a precisely fitting manner. According to fig. 4, these additional cladding elements 3 are arranged between two further cladding elements 2 situated opposite one another in the transverse direction of the vehicle, and thus span the central region of the roof 5. A modification (not shown) comprises configuring the further cladding elements 2 in such a way that, in a manner corresponding to the additional cladding elements 3, they may be arranged between two cladding elements 1 situated opposite one another in the transverse direction of the vehicle and likewise span the central region of the roof 5. Moreover, the further cladding elements 2

may also be used as intermediate pieces for simple adaptation to different vehicle widths.

The cladding elements 1, 2 and 3 may optionally be equipped with a lighting unit 6 (see fig. 6). It is possible for the coving elements 4, too, to have a lighting unit 7 which preferably comprises a lighting fixture which is fitted into a cutout 4a in the coving element 4 and is detachably connected to the coving element 4 for replacement purposes. The lighting fixture may for example contain a fluorescent tube and/or round lamps (spotlights). The particular ideas that the customers have with regard to vehicle lighting may be taken into account in a simple manner.

List of reference numbers

- |    |   |
|----|---|
| 1  | cladding element (base module) for the door drive |
| 1a | bearing surface                                   |
| 2  | further cladding element                          |
| 2a | bearing surface                                   |
| 3  | additional cladding element                       |
| 4  | coving element                                    |
| 4a | cutout  |
| 5  | roof  |
| 6  | lighting unit for the cladding element            |
| 7  | lighting unit for the coving element              |
| 8  | floor   |
| 9  | door  |
| 10 | side wall   |